

Abstract

A method of measuring a change in thickness of a layer of material disposed on a wafer while polishing the layer. Light is directed at the surface of the wafer from an optical sensor
5 disposed within the polishing pad. The intensity of the reflected light is measured by a light detector also disposed in the polishing pad. The intensity of the reflected light varies sinusoidally with the change in layer thickness as the layer is removed. By measuring the absolute thickness of the layer at
10 two or more points along the sinusoidal curve, the sinusoidal curve is calibrated so that a portion of the wavelength of the curve corresponds to a change in thickness of the layer.